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INTERNATIONAL SEARCH REPORT

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(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P3159 WO ORD	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/GB2004/001521	International filing date (day/month/year) 08/04/2004	(Earliest) Priority Date (day/month/year) 09/04/2003
Applicant AOTI OPERATING COMPANY, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.

Certain claims were found unsearchable (See Box II).

3.

Unity of invention is lacking (see Box III).

4. With regard to the title,

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

DETECTION METHOD AND APPARATUS METAL PARTICULATES ON SEMICONDUCTORS

5. With regard to the abstract,

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 4A



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2004/001521

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N21/64 G01N21/95 G01R31/265

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N G01R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/29883 A (HIGGS VICTOR ;AOTI OPERATING COMPANY INC (US)) 11 April 2002 (2002-04-11) page 16 -page 18; figure 5	1-19
A	WO 02/077621 A (HIGGS VICTOR ;AOTI OPERATING COMPANY INC (US)) 3 October 2002 (2002-10-03) page 6 -page 8; claims 2,3 page 14 -page 16	1-19
A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 06, 3 June 2003 (2003-06-03) & JP 2003 045928 A (SHIN ETSU HANDOTAI CO LTD), 14 February 2003 (2003-02-14) abstract; figure 9	1-19
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

14 July 2004

Date of mailing of the international search report

22/07/2004

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2004/001521

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98/11425 A (BIO RAD MICROMEASUREMENTS LTD ;MAYES IAN CHRISTOPHER (GB); HIGGS V) 19 March 1998 (1998-03-19) page 16, line 7-11 ---	1-19
A	WESTRATE S ET AL: "PHOTOLUMINESCENCE MAPPING DETECTS CU CONTAMINATION IN SI WAFERS" SOLID STATE TECHNOLOGY, COWAN PUBL.CORP. WASHINGTON, US, vol. 45, no. 2, February 2002 (2002-02), pages 57-58, XP001092608 ISSN: 0038-111X page 58, line 1,2 ---	1-19
A	HIGGS V ET AL: "Application of room temperature photoluminescence for the characterization of impurities and defects in silicon" PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, vol. 3895, 13 September 1999 (1999-09-13), pages 21-37, XP002187098 ISSN: 0277-786X page 24-26 ---	1-19
A	COMMERE B ET AL: "Control of the Fabrication Steps of InP MIS Transistors by Means of Scanning Photoluminescence Measurements" JOURNAL DE PHYSIQUE. COLLOQUE, PARIS, FR, vol. 49, no. C-4, SUPPL 9, September 1988 (1988-09), pages 431-436, XP009017749 ISSN: 0449-1947 page 432, line 1-27 ---	1-19
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 10, 17 November 2000 (2000-11-17) & JP 2000 193597 A (SUMITOMO METAL IND LTD), 14 July 2000 (2000-07-14) abstract; figure 1 ---	1-19
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01, 31 January 2000 (2000-01-31) & JP 11 274257 A (SHIN ETSU HANDOTAI CO LTD), 8 October 1999 (1999-10-08) abstract; figure 2 ---	1-19

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2004/001521

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PATENT ABSTRACTS OF JAPAN vol. 2000, no. 03, 30 March 2000 (2000-03-30) & JP 11 354599 A (MEMC KK), 24 December 1999 (1999-12-24) abstract; figure 4</p> <p>---</p>	1-19
A	<p>HIGGS V: "Characterization of Si, SiGe and SOI Structures using Photoluminescence" MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS, MATERIALS RESEARCH SOCIETY, PITTSBURG, PA, US, vol. 588, 2000, pages 129-140, XP009017743 ISSN: 0272-9172 figures 2,12</p> <p>-----</p>	1-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2004/001521

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0229883	A	11-04-2002	AU 9211001 A	15-04-2002
			CN 1479944 T	03-03-2004
			EP 1323188 A1	02-07-2003
			WO 0229883 A1	11-04-2002
			JP 2004511104 T	08-04-2004
			US 2004106217 A1	03-06-2004
WO 02077621	A	03-10-2002	EP 1373869 A1	02-01-2004
			WO 02077621 A1	03-10-2002
			US 2004092042 A1	13-05-2004
JP 2003045928	A	14-02-2003	NONE	
WO 9811425	A	19-03-1998	AU 4126997 A	02-04-1998
			DE 69718917 D1	13-03-2003
			DE 69718917 T2	19-02-2004
			EP 0925497 A1	30-06-1999
			WO 9811425 A1	19-03-1998
			JP 3440421 B2	25-08-2003
			JP 2001500613 T	16-01-2001
			KR 2000035954 A	26-06-2000
JP 2000193597	A	14-07-2000	NONE	
JP 11274257 7	A		NONE	
JP 11354599 7	A		NONE	